## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANTS:

LINDA S. POWERS and CHRISTOPHER R. LLOYD

SERIAL NO.:

FILED HEREWITH:

FOR:

METHOD AND APPARATUS FOR DETECTING THE PRESENCE OF MICROBES AND DETERMINING THEIR PHYSIOLOGICAL STATUS

## PRELIMINARY AMENDMENT

December 30, 2003

Mail Stop Non Fee Amendment Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

Please amend Claims 14, 15 and 16.

- 14. (Currently Amended) Apparatus for the detection of microbes <u>in a sample</u> on a nonliving <u>surface</u> <u>surface</u>, <u>or in air air</u>, or liquid comprising:
  - a. means for directing electromagnetic radiation towards the sample, said means adapted to emit radiation at energies capable of exciting at least one intrinsic microbial fluorophore;
  - b. at least one detector for electromagnetic radiation capable of converting the emitted, or reflected/scattered reflected and scattered radiation into electrical signals, said detector adapted to detect electromagnetic radiation at wavelengths above 320 nm to

detect the minima and maxima associated with the fluorescence emission of said microbial fluorophores; and

c. means for analyzing the electrical signals corresponding to the fluorescence of the intrinsic microbial flluorophores and the reflected/scattered reflected and scattered excitation energies intensities to determine the presence of microbes.

15. (Currently Amended) The <u>apparatus method</u> as defined in <del>claim 1</del> Claim 14, wherein the electromagnetic waves are directed towards the microbes in time-modulated pulses.

16. (Currently Amended) The apparatus defined in Claim 14 Claim 14, wherein the means for directing electromagnetic radiation includes means for time-modulating the electromagnetic radiation.

Respectfully submitted,

K. S. Cornaby

Attorney for Applicants

Jones Waldo Holbrook & McDonough, PC

170 South Main Street, Suite 1500

Salt Lake City, UT 84101

(801) 521-3200

## **CERTIFICATE OF SERVICE**

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Asberta M. Kelly/Roberta M. Kelly/